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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

GUBIOTTI, MATTHEW P

ART UNIT

PAPER NUMBER

2124

DATE MAILED: 11/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/458,121

Applicant(s)

MOAS ET AL.

Examiner

Matthew Gubiotti

Art Unit

2124

-- Th MAILING DATE of this communication app ars on the cover sh et with th correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/08/99 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Figures 2 and 3 are handwritten. Additionally, the applicant should examine spacing and margin requirements for formal drawings. Formal drawings will be required when the application is allowed.
2. Figure 1A-1D should be designated by a legend such as -- Prior Art-- because only that which is old is illustrated. The specification refers to these figures as illustrating a process disclosed as prior art (Page 7, Lines 1-2; Lines 17-18). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application (See MPEP § 608.02(g)). The objection to the drawings will not be held in abeyance.

Specification

3. The use of the trademark ``Intel'' has been noted in this application. (e.g. Page 7, Line 5) It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Art Unit: 2124

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-3, 5-12, 14-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Yates (US 6,091,897). Referring to claim 1, Yates discloses a method for determining a set of needed resources for a block of code (Column 9, Lines 24-31; Column 11, Lines 3-6), a check to determine if the resources are present at the start of the code (Column 10, Lines 15-28), and an error signaling method (Column 29, Lines 4-20).

Art Unit: 2124

Referring to claim 2, Yates discloses a method for the determination of the available resources following the execution of a block of code (Column 11, Lines 22-37)

Referring to claim 3, Yates discloses a method in which needed resources for a block of code include stack contents (Column 5, Lines 26-29; Figure 22).

Referring to claim 5, Yates discloses a method in which resources are determined dynamically (Column 52, Lines 48-57).

Referring to claims 6 and 7, Yates teaches a fault handler routine that simulates a processor exception should the required resources for a block of code not be available (Column 86, Lines 12-35).

Referring to claims 8 and 9, Yates teaches the use of a dynamically generated bit vector to represent resources. (Column 68, Lines 2-4).

In reference to claims 10-12 and 14-18, the claims are the apparatus claims corresponding to claims 1-3 and 5-9, respectively. The claims are rejected under the same arguments as cited above.

6. Referring to claim 19, Yates discloses a computer-readable medium that, through binary translation, transforms a first set of instructions into a second set of instruction (Column 4, Lines 1-12). Yates further discloses the method of determining a set of needed resources for a block of code (Column 9, Lines 24-31; Column 11, Lines 3-6), a check to determine if the resources are

Art Unit: 2124

present at the start of the code (Column 10, Lines 15-28), and an error signaling method (Column 88, Lines 9-13).

Referring to claim 20, Yates discloses a method for the determination of the available resources following the execution of a block of code (Column 11, Lines 22-37).

Referring to claim 21, Yates discloses a method in which needed resources for a block of code include stack contents (Column 5, Lines 26-29; Figure 22).

Referring to claim 22, Yates discloses a method in which resources are determined dynamically (Column 52, Lines 48-57).

Referring to claims 23 and 24, Yates teaches a fault handler routine that simulates a processor exception should the required resources for a block of code not be available (Column 86, Lines 12-24).

Referring to claim 25, Yates teaches the use of a bit vector to represent resources. (Column 68, Lines 2-4).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2124

8. Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yates (US 6,091,897) in view of Mondrik (US 5,627,998). Referring to claim 4, and as described above, Yates discloses a method for determining a set of needed resources for a block of code (Column 9, Lines 24-31; Column 11, Lines 3-6), a check to determine if the resources are present at the start of the code (Column 10, Lines 15-28), and an error signaling method (Column 88, Lines 9-13). Yates does not expressly disclose that the method taught for the determination of resources occurs at compile-time. Mondrik discloses a method of determining resources at compile-time (Column 6, Lines 36-45). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art that the method disclosed in Yates may be used to determine the required resources for a block of code at compile-time. One of ordinary skill in the art would have been motivated to do this because an earlier determination of required resources for execution of a block of code may improve the efficiency of an computational process through optimization, as described by Yates (Column 3, Lines 43-46) and Mondrik (Column 6, Lines 41-45).

Claim 13 is the apparatus claim corresponding to claim 4. The claim is rejected under the same arguments as cited above.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Included for

Art Unit: 2124


review are Yates (US 5,930,509) entitled ``Method and Apparatus for Performing Binary Translation'' and Bush (US 5,790,778) entitled ``Simulated Program Execution Error Detection Method and Apparatus''.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Gubiotti whose telephone number is (703) 305-8285. The examiner can normally be reached on M-F, 8-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703) 305-9662. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

MPG
November 4, 2002


GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER